phial to the rod, inſtead of the uſual ſtream that I expected from the wire to the rod, there was no ſpark; not even when I brought the wire and the rod to touch; yet the bells continued ringing vigorouſly; which prov'd to me, that the rod was then *poſitively* electrify'd, as well as the wire of the phial, and equally ſo; and conſequently, that the particular cloud then over the rod, was in the ſame poſitive ſtate. This was near the end of the guſt.

But this was a ſingle experiment, which however deſtroys my firſt too general concluſion, and reduces me to this: *That the clouds of a thunder-guſt are moſt commonly in a negative ſtate of electricity, but ſometimes in a poſitive ſtate.*

The latter I believe is rare; for tho' I ſoon after the laſt experiment, ſet out on a journey to *Boſton*, and was from home moſt part of the ſummer, which prevented my making farther trials and obſervations; yet Mr *Kinnerſley* returning from the iſlands juſt as I left home, purſu'd the experiments during my abſence, and informs me that he always found the clouds in the *negative* ſtate.

So that, for the moſt part, in thunder-ſtrokes, *'tis the earth that ſtrikes into the clouds, and not the clouds that ſtrike into the earth.*

Thoſe who are verſ'd in electric experiments, will eaſily conceive, that the effects and appearances muſt be nearly the ſame in either caſe; the ſame exploſion, and the ſame flaſh between one cloud and another, and between the clouds and mountains, *&c.* the ſame rending of trees, walls, *&c.* which the electric fluid meets with in its paſſage, and the ſame fatal ſhock to animal bodies; and that pointed rods fix'd on buildings, or maſts of ſhips, and communicating with the earth or ſea, muſt be of the ſame ſervice in reſtoring the equilibrium ſilently between the earth and clouds, or in conducting a flaſh or ſtroke, if one ſhould be, ſo as to ſave harmleſs the houſe or veſſel: For points have equal power to throw off, as to draw on the electric fire, and rods will conduct up as well as down.

But tho' the light gain'd from theſe experiments makes no altration in the practice, it makes a conſiderable one in the theory. And now we as much need an hypotheſis to explain by what means the clouds become negatively, as before to ſhew how they became poſitively electrified.

I cannot forbear venturing ſome few conjectures on this occaſion: They are what occur to me at preſent; and tho' future diſcoveries ſhould prove them not wholly right, yet they may in the mean time be of ſome uſe, by ſtirring up the curious to make more experiments, and occaſion more exact diſquiſitions.

I conceive then, that this globe of earth and water, with its plants, animals and buildings, have, diffus'd throughout their ſubſtance, a quantity of the electric fluid, juſt as much as they can contain, which I call the *natural quantity*.

That this natural quantity is not the ſame in all kinds of common matter under the ſame dimenſions, nor in the ſame